REMARKS

Regarding the status of the present application, Claims 1 and 12 have been amended, and Claims 1-20 are pending in this application. Reconsideration of this application is respectfully requested.

Claims 1-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,583,521 issued to Lagod et al. It is respectfully submitted that the Examiner's position is in error. Claim 1 has been amended to recite aspects that are clearly not disclosed or suggested by the Lagod et al. patent.

The present invention provides for methods and apparatus that are operative to couple standby power to certain non-critical loads that implement load reduction to assist utilities in avoiding power shortages and resultant blackouts. An exemplary utility electrical distribution system comprises a primary utility source coupled to an electrical breaker panel that distributes power to a plurality of loads comprising non-critical loads, critical loads, and load reduction loads. A secondary power source is coupled to an automatic transfer switch that distributes power to the critical loads from the secondary power source if power is not available from the primary utility source. A secondary transfer switch, referred to as a load reduction transfer switch, wired in parallel to the automatic transfer switch, distributes power to the load reduction loads to reduce power demand on the primary utility source so long as the primary source is available. The load reduction transfer switch is connected between the secondary power source or generator and selected non-critical loads that may be safely powered by the secondary power source or generator.

The Lagod et al. patent, in the abstract states that "In the event that the power grid is disabled, or is otherwise unable to provide adequate power to the consumer, the on-site generators are switched to provide power to critical equipment." This is not what is provided by the present invention. In the present invention, the secondary load reduction transfer switch is commanded to operate only when primary power is available. It is respectfully submitted that this is not disclosed or suggested in the Lagod et al. patent.

The Lagod et al. patent discloses, with reference to Fig. 1, a "system for managing the supply of energy to a load that receives power from an electric power grid. This system comprises an "on-site power generator that is capable of supplying power to said load independently of the power grid". "a controller which processes data relating to at least one factor that is predictive of the reliability and/or quality of power supplied to said load, and selects the power grid or the on-site generator as a preferred power source", and "a switch which is responsive to the selection of the preferred power source to connect the load to the selected power source." (see claim 1 for example)

Thus, the switch referred to in Lagod et al. patent corresponds to the presently disclosed automatic transfer switch, not the secondary transfer switch, or load reduction transfer switch. There is no disclosure or suggestion whatsoever in the Lagod et al. patent regarding connecting any of the switches shown in Fig. 1, for example, to load reduction loads that are designated for

removal from a primary power source during times requiring load reduction. Thus, it is respectfully submitted that this concept is not disclosed in the Lagod et al. patent.

Furthermore, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest logic and a command process that are operative to locally measure the electrical load, and automatically transfer selected loads to the secondary power source via the secondary load reduction transfer switch if power demand approaches a threshold set by a user. As is stated in the Lagod et al. patent, the measurement process is performed by the utility company. It is respectfully submitted that there is no local user threshold that may be set in the Lagod et al. system.

Therefore, with regard to Claim 1, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest apparatus "for connecting a secondary power source to electrical loads that are designated for removal from a primary power source during times requiring load reduction", because there are no load reduction loads discussed in the Lagod et al. patent. The terms "reduction" and "load reduction" are not used in the Lagod et al. patent.

While the Lagod et al. patent discloses a switch coupled between the primary power source and the electrical loads and between the secondary power source and the electrical loads, it does not disclose or suggest a remotely controllable secondary load reduction transfer switch coupled between the primary power source and the electrical loads and between the secondary power source and the electrical loads. While the Lagod et al. patent discloses multiple parallel switches, there is clearly no discussion contained in the Lagod et al. patent relating to connection any of the switches to electrical loads that are designated for removal from a primary power source during times requiring load reduction, as is presently claimed.

It is stated in the first paragraph of the Summary of the Invention section of the Lagod et al. patent that "In one embodiment of the invention, the power provided by the on-site generators complements that which is delivered via a centralized power grid network. For example, the on-site generators can be normally configured to provide power to critical components of the consumer, such as refrigeration equipment, and the power requirements of other equipment can be supplied by the power grid. In the event that the power grid is disabled, or is otherwise unable to provide adequate power to the consumer, the on-site generators can be switched to provide power to the other equipment in lieu of, or in addition to, the principally supported components." Thus, it is clearly stated in the Lagod et al. patent that the on-site generators are used "when the power grid is disabled", and that "the on-site generators can be switched to provide power to the other equipment in lieu of, or in addition to, the principally supported components." From this it is clear that the generators supply power to all equipment "when the power grid is disabled," or "supply power to other equipment in lieu of, or in addition to, the principally supported components." This is clear indication that there is no disclosure or suggestion in the Lagod et al. patent that the generators supply power to "electrical loads that are designated for removal from a primary power source during times requiring load reduction" as is done in the present invention.

It is respectfully submitted that the Lagod et al. patent does not disclose or suggest "logic that enables the remotely controllable secondary load reduction transfer switch to operate only when primary power is available and when commanded to do so" as is recited in Claim 1 There is no secondary load reduction transfer switch configured as disclosed in the present application disclosed or suggested in the Lagod et al. patent.

Finally, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest "a command process for sending a command for the remotely controllable secondary load reduction transfer switch that is transferred to the logic of the remotely controllable secondary load reduction transfer switch to cause it to connect ~~a~~ the secondary power source to electrical loads coupled thereto that are designated for disconnection from the primary power source during times requiring load reduction." Again, there are no electrical loads disclosed in the Lagod et al. patent that are that are designated for disconnection from the primary power source during times requiring load reduction.

Therefore, it respectfully submitted that Claim 1 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 5, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest that the logic and command process are operative to locally measure the electrical load, and automatically transfer selected loads to the secondary power source via the secondary load reduction transfer switch if power demand approaches a threshold set by a user." The measurement process disclosed in the Lagod et al. patent is performed by the utility company, and there is no local user threshold that may be set using the Lagod et al. system. Therefore, it respectfully submitted that Claim 5 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 7, and in view of the arguments made above regarding Claim 1, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest "an electrical breaker panel that distributes power to a plurality of loads comprising non-critical loads, critical loads, and load reduction loads" and "a load reduction transfer switch, wired in parallel to the automatic transfer switch, for distributing power to the load reduction loads to reduce power demand on the primary power source." The Lagod et al. patent clearly does not disclose or suggest any load reduction loads or a load reduction transfer switch that is wired in parallel with an automatic transfer switch that distributes power to the load reduction loads. Therefore, it respectfully submitted that Claim 7 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 10, there is no discussion in the Lagod et al. patent that "operation of the automatic transfer switch and load reduction transfer switch are mutually exclusive." The Lagod et al. patent does not disclose or suggest the use of both an automatic transfer switch and a load reduction transfer switch as is contemplated by the present invention. Therefore, it respectfully submitted that Claim 7 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 13, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest details of the load reduction transfer switch and the control logic circuitry that is presently claimed. It is respectfully submitted that the Lagod et al. patent does not disclose or suggest "a transfer switch control circuit that (1) senses the presence or absence of voltage from the primary power source, and if the voltage is lost, provides a start signal to the secondary power source, causing it to begin producing power, (2) monitors power produced by the secondary power source, and when a stable voltage and frequency are reached, initiates transfer of power to the loads from the primary power source to the secondary power source; and (3) selectively controls an actuator via a control signal to cause the power transfer from the primary power source to the secondary power source and vice-versa" and "a load reduction control circuit for receiving a command that applies power from the primary power source to an actuator that breaks connection of the voltage to the transfer switch control circuit and initiates startup of the secondary power source, the transfer of power to the load reduction loads, and that keeps the transfer switch from operating if power from the primary power source is absent." Therefore, it respectfully submitted that Claim 13 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 15, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest that the "load reduction transfer switch is operative to locally measure electrical load, and automatically transfer selected loads to the secondary power source via the load reduction transfer switch if power demand approaches a threshold." The measurement process disclosed in the Lagod et al. patent is performed by the utility company, and there is no local user threshold that may be set using the Lagod et al. system. Therefore, it respectfully submitted that Claim 15 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

With regard to Claim 17, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest a method that comprises the steps of "coupling a remotely controllable second transfer switch between the secondary power source and a subset of load reduction loads that are to be disconnected from the primary power source during times requiring load reduction" and "remotely controlling the second load reduction transfer switch to supply power from the secondary power source to the subset of load reduction loads in lieu of supplying power from the primary power source when power from the primary power source is available and during times requiring load reduction." The Lagod et al. system has no second transfer switch coupled between the secondary power source and a subset of load reduction loads that are to be disconnected from the primary power source during times requiring load reduction. There are no load reduction loads disclosed or suggested in the Lagod et al. patent. Therefore, it respectfully submitted that Claim 17 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

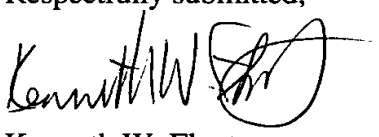
With regard to Claim 19, it is respectfully submitted that the Lagod et al. patent does not disclose or suggest a method that comprises the steps of "coupling a remotely controllable

second transfer switch between the primary power source and the loads, and between the secondary power source and a subset of load reduction loads that are to be removed from the power grid during times requiring load reduction" and "remotely controlling the second load reduction transfer switch to supply power from the secondary power source to the subset of load reduction loads in lieu of supplying power from the primary power source thereto when power from the primary power source is available and during times requiring load reduction." There are no load reduction loads disclosed or suggested in the Lagod et al. patent. The arguments made above with regards to Claims 1 and 7 are relevant to the allowability of Claim 19. Therefore, it respectfully submitted that Claim 19 is not disclosed or suggested by the Lagod et al. patent. Withdrawal of the Examiner's rejection is respectfully requested.

Dependent Claims 2-6, 8-16, 18 and 20 are considered allowable based upon the allowability of the independent Claims from which they depend. Therefore, it respectfully submitted that Claims 2-4, 6, 8, 9, 11, 12, 14, 16, 18 and 20 are patentable over the Lagod et al. patent. Withdrawal of the Examiner's rejection of Claims 2-4, 6, 8, 9, 11, 12, 14, 16, 18 and 20 is respectfully requested.

In view of the above, it is respectfully submitted that all pending Claims are allowable over the art of record and that the present application is in condition for allowance. Reconsideration and allowance of this application are earnestly solicited.

Respectfully submitted,



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